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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,910	03/01/2002	Akiyoshi Hashimoto	H-1039	7123

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EXAMINER

SHERKAT, AREZOO

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/084,910	HASHIMOTO ET AL.
Examiner	Art Unit	
Arezoo Sherkat	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 March 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 01 March 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/9/06</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/9/2006 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 17, and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Blumenau et al., (U.S. Publication No. 2002/0007445 and Blumenau hereinafter).

Regarding claim 1, Blumenau discloses a second storage, comprising:
a plurality of nonvolatile data storing means (i.e., storage devices 28-31), a controller of the nonvolatile data storing means (i.e., storage controller 27), and an

internal network interconnecting the nonvolatile data storing means with the controller (page 3, par. 0053-0057),

wherein the controller includes a plurality of network transportation ports connected to different networks (i.e., a plurality of port adaptors 35 and 36), respectively, an access controller for processing I/O commands of different types requested for the transportation ports, and an access controlling table for storing access control setting information for each of said network transportation ports that defines one of unauthorized access for the I/O commands or authorized access for at least one of the types of the I/O commands between each of the plurality of network transportation ports and each of the plurality of nonvolatile data storing means (pages 8-9, par. 0094-0096),

Regarding claims 8 and 17, Blumenau discloses Regarding claims 1-2, 8, and 17, Sanada discloses a second storage, comprising:

a plurality of nonvolatile data storing devices (i.e., storage devices 28-31), a controller of the nonvolatile data storing devices connected to each of the data storing devices (i.e storage controller 27), said controller having a plurality of network transportation ports connected to different networks (i.e., a plurality of port adaptors 35 and 36)(page 3, par. 0053-0057),

respectively, an access controller for processing I/O commands of different types requested for the transportation ports, and an access controlling table for storing access control setting information for each of said network transportation ports that defines one

of unauthorized access for the I/O commands or authorized access for at least one of the types of the I/O commands between each of the plurality of network transportation ports and each of the plurality of nonvolatile data storing devices, wherein said access controller judges the unauthorized access or the authorized access of the I/O commands requested for each of the transportation ports based on the access control setting information (pages 8-9, par. 0094-0096).

Regarding claim 2, Blumenau discloses wherein the access controller judges the authorization or rejection of the I/O commands requested for the transportation ports based on the access control setting information (pages 8-9, par. 0094-0096).

Regarding claims 3 and 19, Blumenau discloses further including a plurality of logical disks comprised of at least one of said data storing devices, wherein said access control setting information defines said one of the unauthorized access for the I/O commands or authorized access for at least one of the types of the I/O commands between each of the plurality of transportation ports and each of the plurality of the logical disks (page 8-9, par. 0091-0096).

Regarding claims 4 and 20, Blumenau discloses further including a management console connected to said controller for setting and changing the access control setting information in the access controlling table for each of the network transportation ports (pages 7-8, par. 0081-0090).

Regarding claims 5-7, Blumenau discloses wherein the access controller reports the I/O command judged as unauthorized to the management console (pages 8-9, par. 0094-0096).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenau et al., (U.S. Publication No. 2002/0007445 and Blumenau hereinafter), in view of Li et al., (U.S. Publication No. 2003/0093509 and Li hereinafter).

Regarding claim 9, Blumenau does not expressly disclose when exceeding a predetermined threshold of unauthorized accesses, access from the plurality of transportation ports the data is not authorized.

However, Li discloses wherein when a judgment frequency of the access non-authorization to specific data stored the nonvolatile data storing means exceeds a predetermined threshold, access from the plurality of transportation ports the data is not authorized (pages 2-3, par. 0027-0030).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the storage assignment method of Blumenau by including wherein when a judgment frequency of the access non-authorization to specific data stored in the nonvolatile data storing means exceeds a predetermined threshold, access from the plurality of transportation ports the data is not authorized as disclosed by Li. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Li to facilitate access by multiple hosts to multiple storage devices in a manner consistent with network administrators' wishes and without risk of unwanted access conflicts (Li, Page 1, Par. 0009).

Regarding claim 10, Blumenau does not expressly disclose wherein an administrator of the second storage is notified.

However, Li discloses wherein when a judgment frequency of the access non-authorization to specific data stored in nonvolatile data storing means exceeds a predetermined threshold, an administrator of the second storage is notified that the judgment frequency of the access non-authorization exceeds a predetermined threshold (pages 2-3, par. 0027-0030).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the storage assignment method of Blumenau by including wherein an administrator of the second storage is notified that the judgment frequency of the access non-authorization exceeds a predetermined

threshold as disclosed by Li. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Li to facilitate access by multiple hosts to multiple storage devices in a manner consistent with network administrators' wishes and without risk of unwanted access conflicts (Li, Page 1, Par. 0009).

Claims 11-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenau et al., (U.S. Publication No. 2002/0007445 and Blumenau hereinafter), in view of Sanada et al., (U.S. Publication No. 2001/0008010 and Sanada hereinafter).

Regarding claims 11-16, Blumenau discloses a fabric may also support a "state change notification" process in which ports having operational links to the fabric may request to be notified by the fabric when a state change is detected (page 6, par. 0073).

Blumenau does not expressly disclose wherein when a system of the I/O commands is the SCSI (Small Computer system interface) standards, a "CHECK CONDITION" status is transmitted as a report of abnormalities.

However, Sanada discloses wherein when a system of the I/O commands is the SCSI (Small Computer system interface) standards, a "CHECK CONDITION" status is transmitted as a report of abnormalities (pages 4-6, par. 0062-0098).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the storage assignment method of Blumenau

by including wherein when a system of the I/O commands is the SCSI (Small Computer system interface) standards, a "CHECK CONDITION" status is transmitted as a report of abnormalities as disclosed by Sanada. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Sanada to deter unauthorized access from any one of the host computers, which in turn makes it possible to attain the intended data secrecy protection within the storage device (Sanada, page 2, par. 0019).

Regarding claim 18, Blumenau does not expressly disclose wherein the different types of I/O commands include READ and WRITE and the access control setting information includes READ only enable, WRITE only enable and recognition disabled for each of the network transportation ports.

However, Sanada discloses wherein the different types of I/O commands include READ and WRITE and the access control setting information includes READ only enable, WRITE only enable and recognition disabled for each of the network transportation ports (page 6, par. 0102-0117).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the storage assignment method of Blumenau by including wherein the different types of I/O commands include READ and WRITE and the access control setting information includes READ only enable, WRITE only enable and recognition disabled for each of the network transportation ports as disclosed by Sanada. This modification would have been obvious because one of

ordinary skill in the art would have been motivated by the suggestion of Li to deter unauthorized access from any one of the host computers, which in turn makes it possible to attain the intended data secrecy protection within the storage device (Sanada, page 2, par. 0019).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DeKoning, (U.S. Patent No. 6,671,776), and

Kitamura et al., (U.S. Patent No. 6,907,498).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.S.

A. Sherk
Patent Examiner
Group 2131
April 12, 2006

CHRISTOPHER REVAK
PRIMARY EXAMINER
CL 4/12/06